

# **Expanding Audiology Services to CBOCs: Bringing Care Closer to Veterans**

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#### Introduction

The Veterans Health Administration (VHA) provided audiology services to 599,105 veterans in FY09 and 687,086 in FY10. As audiology service demand has increased and hearing aid eligibility has expanded to more Veterans, requests to provide these services in rural areas have also increased. Rural Veterans account for more than 65% of all enrollees in VISN 23, thus resulting in greater travel burden for these Veterans to receive audiology services that are predominantly limited to VA Medical Centers. Travel is often difficult for the elderly, who have the highest demand for hearing aids, and for those with serious illnesses. Long travel time can not only exacerbate existing clinical conditions, but limits access to care. A qualitative study of rural older adults found travel distance to be the strongest barrier to health care. Further, travel distance was found to be the strongest predictor of poor retention in treatment of serious mental illness and substance abuse, indicating distance is a barrier to receiving care.<sup>2-3</sup>

The purpose of this project was to expand access to audiology services in five rural Community Based Outpatient Clinics (CBOCs) affiliated with the VA Central lowa Health Care System (VA CIHCS) -

# **Key Findings**

- Utilization of audiology services increased when offered closer to Veteran's homes
- Local audiologists were more willing to partner with VHA in providing care in CBOCs than originally anticipated
- Need for audiology technicians to repair hearing aids, is as great, or greater than the need for an audiologist in CBOCs
- 1,091 central lowa Veterans, saved an estimated
   328,166 miles or 5,417 hours of travel time
  - Estimated Travel Pay savings \$42,293
  - 1,767 encounters shifted to CBOCs

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Marshalltown, Mason City, Ft. Dodge, Knoxville, and Carroll, IA. The goal was twofold: a) reach Veterans who had not previously utilized audiology services due to distance, and b) bring services closer to Veterans already utilizing the services in an effort to reduce travel burden. Four of the five CBOCs had not offered audiology services before this project.

#### Methods

Using VA data of central lowa veterans accessing audiology services during FY09, 48% live in counties serviced by VA CICHCS existing or planned CBOCs. In addition, the Des Moines VAMC was experiencing significant space constraints generating interest in expanding audiology services to all five operational and planned CBOCs.

A space and cost benefit analysis conducted during the planning phase determined that placing audiology booths in each CBOC was not recommended because of equipment and space modification costs versus volume of patients. The initiative instead chose to focus on offering services such as hearing aid fittings, adjustments, and repairs. Initial audiology exams, which require a booth, continued to be performed at the parent facility (Des Moines VAMC). Based on FY09 data, this pilot was expected to bring audiology services closer to the homes of 1,472 rural Veterans served by VA CIHCS. The plan was submitted and approved by the Office of Rural Health (ORH) for FY09-10 funding.

Local audiologists were retained through fee basis provider arrangements to provide services a minimum of one day per week in each CBOC. Local audiologists came from a wide-spectrum of backgrounds to serve rural CBOCs. For example, a group practice employing five audiologists served the Mason City CBOC whereas a sole proprietor who employed an audiology technician served the Ft. Dodge CBOC. Additionally, a part-time arrangement was made for two audiologists to serve the Marshalltown and Knoxville CBOCs.

Necessary equipment, such as a server to link non-CPRS audiology records (NOAH and ROES) across all CBOC sites and with the parent facility was purchased with ORH funds. CPRS also linked records from all sites.

One room at each CBOC was set up as an audiology clinic. The Ft. Dodge CBOC leased a room with ORH funds. Rooms for the remaining four CBOC audiology clinics came from available space and required no additional funding.

The option to utilize audiology technicians presented itself at two CBOC facilities (Knoxville and Ft. Dodge). Audiology technicians were scheduled to provide eight hours of service per week at each of these two sites, supported by ORH funds.

## **Findings**

The pilot was operational from 1 to 10.5 months during FY09-FY10 (Table 1), although one CBOC did not open as planned in FY10. Audiologist and audiology technician availability (measured in hours) increased considerably at Ft. Dodge, with other sites having greater demand that could not be met by local audiologists. Actual FY10 audiology encounters were lower than projected. This was due to the inability to increase the Mason City CBOC provider coverage, the Carroll

Figure 1. Stuart Trembath AuD. fits a veteran's hearing aid at the Mason City CBOC

CBOC	Duration Project Operational (months)	Coverage at the start of project	End of FY10 Coverage	Coverage at the start of project	End of FY10 Coverage	Projected Encounters based on FY09	Actual FY10 Audiology Encounters	Actual FY10 Audiology Technician Workload
		Audiologist Hours/week		Audiology Technician Hours/week		Utilization		
Ft. Dodge	10.5	8	12	4	8	661	1,036 (57% > projected)	44% of total
Mason City	6.75	8	8 *	NA	NA	450	402 (11% < projected)**	NA
Knoxville	9.5	0	8	8	8	459	305 (34% < projected)***	87% of total
Marshalltown	1	8	8	NA	NA	25	24 (4% < projected)	NA
Carroll	to open in FY11	NA	NA	NA	NA	NA	NA	NA

<sup>\*</sup>Not able to increase due to other professional commitments by local audiologists

CBOC not opening as originally planned, and delays in initiating services in Marshalltown.

This initiative brought audiology services for the first time to central lowa CBOCs and closer to the homes of 1,091 central lowa Veterans. These expanded CBOC services saved an estimated 328,166 miles of driving or 5,417 hours of travel time (**Table 2**). When extrapolated to VA travel pay savings, an estimated \$42,293 was saved in travel pay. (Assumes 38% were eligible for travel pay at 40.6 cents per mile, minus the deductible.)

One in five Veterans receiving audiology care through the VA CIHCS during the year was able to absorb a 21% increase in workload during FY10

receive part of their care in a CBOC near their home. This initiative also allowed VA CIHCS to and yet maintain appointment times within 30 days. It also reduced congestion in audiology clinics at the parent facility as illustrated by workload measurement. In the past three years, the Des Moines VAMC workload grew at a rate above 20% per year. During FY 2010 workload at the Des Moines facility grew by only 8% while Central lowa audiology grew 21%. Funding the start-up of audiology services in central lowa CBOCs through the financial support of ORH positioned VA CIHCS to continue providing these services using facility operational funds.

Table 2. Unique Veterans, Estimated Driving Miles, and Travel Time Saved by Site							
СВОС	Number of Unique Veterans	Estimated Number of Veteran Driving Miles Saved	Estimated Hours of Veteran Drive Time Saved (assume 60mph speed limit)				
Ft. Dodge	533	198,912	3,315				
Mason City	306	98,088	1,635				
Knoxville	231	28,670	479				
Marshalltown	21	2,496	42				
Carroll	NA	NA	NA				
TOTAL = 1,091		328,166 miles	5,417 hours (~136 weeks or 2+ years)				

<sup>\*\*</sup> Due to inability to increase provider coverage

<sup>\*\*\*</sup> Number of encounters has doubled during the month an audiologist has been working

First year costs of the expanded services at the four CBOCs was \$160,060, including: Staffing (\$108,215), Equipment (\$43,995), Leased Space (\$5,500), and Supplies (\$2,350).

### **Conclusions**

This ORH-funded rural health pilot project resulted in both considerable travel savings for Veterans and expansion of necessary specialty services to CBOCs that had previously only been available at a VAMC. Without this pilot project opportunity, the expansion of audiology services to CBOCs would have taken much longer or not occurred at all.

Given the inability to predict Veteran demand for each CBOC with any degree of certainty, the use of "fee basis" (fee provider) agreements to pay community audiologists and technicians provided the financial flexibility to start small and grow professional coverage to match veteran demand. At this stage of the initiative, it proved to be more cost effective than hiring part-time VA staff or contracting for these services.

Extending audiology services to VA CIHCS CBOCs continues to evolve. Of the five CBOCs, Ft. Dodge is the only one close to meeting patient demand for audiology services. While the focus of this initiative was to extend audiologist services to CBOCs, actual experience proved the value of audiology technicians. Veterans are more willing to drive 100 miles for an hour long booth appointment at the parent VAMC with an audiologist than for a ten minute appointment with an audiology technician to repair tubing, change batteries, or clean their hearing aid.

The VA CIHCS focus for FY 2011 is threefold:

1) start audiology services in the Carroll Clinic as soon as it opens; 2) add audiology technician services to Mason City, Marshalltown and Carroll CBOCs; 3) continue to maintain and expand audiologists' services to meet the demand at each CBOC.

Senior local management intends for this to be a permanent addition to the CBOC menu of clinical services and is including it in documents intended for distribution to Veterans and service organizations.

Based upon the success of this project and lessons learned, VA CIHCS is planning to expand other specialty services to CBOCs including optometry services in FY11 and podiatry in FY12.

## **Impact**

- Extending selected audiology services into VA Central lowa Health Care System CBOCs saved veterans time and travel costs.
- Shifted 1,767 encounters to a CBOC closer to their home.
- VA CIHCS audiology grew 21% in FY10 without exceeding parent facility capacity.
- The estimated one year staffing cost of the initiative was \$160,060.
- ORH funding accelerated expansion of audiology services to CBOCs.

#### References

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Approved by ORH INSERT DATE and available on-line at <a href="http://www.ruralhealth.va.gov/">http://www.ruralhealth.va.gov/</a>